

REMARKS

Claims 1-5, 8-16, 21-27, 30, 31, 35-38, 40-42, 46-50, 52, 56 and 57 are pending. Claims 1-5, 8-16, 21-27, 30, 31, 35-38, 40-42, 46-50, 52, 56 and 57 are rejected. Applicant traverses these rejections and respectfully requests reconsideration of the rejected claims in light of the following remarks.

Claim Rejections Under 35 U.S.C. § 102

Claims 1 and 8-16, 23, 46, 52, 56 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,984,339 to Provost et al. ("Provost").

Independent claims 1 and 46 are each directed to a touch fastener having a sheet-form base and an array of fastener elements. Claim 1 requires, in pertinent part, that the head of the touch fastener has an overall height that is greater than 55 percent of an overall height of the fastener element, and the touch fastener has a ratio of an overall height of the crook to an entrance height that is greater than 0.6.

Provost discloses hook and loop fasteners having a profile defined by inner and outer generally concave and convex smooth surfaces, respectively. The disclosure provides a hook height of 0.050 inches \pm 0.002 inches (col. 5, line 8), but does not disclose or suggest that the head of the touch fastener has an overall height that is greater than 55 percent of an overall height of the fastener element. Furthermore, Provost fails to disclose or suggest any particular relationship between the height of the fastener head and the overall height of the fastener element; nor does it disclose any ratio between the overall height of the crook to an entrance height of the fastener. The Office contends that the claimed relationship and ratio are disclosed in Provost's Fig. 6. However, there is no indication that Fig. 6 was drawn to scale. In fact, it must be presumed that Provost's drawings are not drawn to scale. The Federal Circuit has held that patent drawings are not drawn to scale, and that the size of patent drawings cannot be used to establish anticipation of a claim limitation relating to size. *See Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565 (Fed. Cir. 1986); *see also, Hockerson-Halberstadt, Inc. v. Avia Group Intl., Inc.*, 222 F.3d 951 (Fed. Cir. 2000).

Claim 46 requires, in pertinent part, that the touch fastener has a ratio of an overall height of the crook to an entrance height of the fastener that is greater than 0.6. Again, the Office contends that the claimed ratio is disclosed in Provost's Fig. 6. However, there is no indication that Fig. 6 was drawn to scale, and it must be presumed that the drawings are not to scale and cannot be used to establish anticipation relating to size.

Therefore, for at least the aforementioned reasons, Applicant requests that the rejection of claims 1 and 46 and their dependent claims be withdrawn and these claims be allowed.

Claims 1 and 8-16, 23, 46, 52, 56 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,116,563 to Thomas et al. ("Thomas"). Thomas is directed towards a process of producing free formed prongs for a mechanical fastening system and discloses a relationship between the included angles of the prongs relative to a substrate plane and the shear strength of the fastening system. Thomas does not disclose or suggest that the head of the touch fastener has an overall height that is greater than 55 percent of an overall height of the fastener element; nor does Thomas disclose or suggest a ratio of an overall height of the crook to an entrance height that is greater than 0.6. The Office contends that the claimed relationship and ratio is disclosed in Thomas's Figs. 1, 7A, 7B, 9A, and 9B. However, there is no indication these figures were drawn to scale, and it must be presumed that the drawings are not to scale and cannot be used to establish anticipation relating to size. Therefore, for at least these reasons, Applicant requests that the rejection of claims 1 and 46 and any corresponding dependent claims be withdrawn and these claims be allowed.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-5, 8-16, 21-27, 30, 31, 34, 46-50, 52, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication US 2003-0012921 A1 to Gallant et al. ("Gallant") in view of Thomas.

Claims 1 and 46 were described above. Claim 24 requires, in pertinent part, that the head of the touch fastener has an overall height that is greater than half of an overall height of the fastener element, and the touch fastener has a ratio of an overall height of the crook to an entrance height that is greater than 0.6.

Gallant discloses a method of forming a mold having cavities for molding hook fastener elements and a resulting fastener formed by the mold. The Office concedes that Gallant fails to disclose 1) a head that has an overall height, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the head, that is greater than 55 percent of an overall height of the fastener element, measured perpendicular to the sheet-form base and 2) a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, that is greater than 0.6. However, the Office contends that it would have been obvious for a person of ordinary skill in the art to have a fastener with the aforementioned relationship and ratio through Thomas's disclosure of a relatively longer fastener shank projecting longitudinally from a base to provide deeper penetration into a receiving surface to allow the heads to intercept or engage a greater number of strands or fibers in combination with the fastener of Gallant. Applicant respectfully disagrees.

Gallant and Thomas both fail to disclose or suggest any particular relationship between the height of the fastener head and the overall height of the fastener element or any ratio between the overall height of the crook to an entrance height of the fastener. Applicants submit that claims 1, 24 and 46 and their dependent claims are non-obvious over Gallant in view of Thomas for at least the reason that neither cited reference or combination of references suggests nor enables a head of a touch fastener having an overall height that is greater than 55 percent of an

overall height of the fastener element or a ratio of an overall height of the crook to an entrance height of the fastener that is greater than 0.6.

Claims 35-38 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallant in view of Thomas and U.S. Patent Publication US 2002-0116799 A1 to Martin et al. ("Martin").

Claim 35 requires, in pertinent part, that the fastener element have a bulk aspect, defined as a ratio of the product of an overall length of the fastener element and fastener element thickness to an overall height of the fastener element of more than 0.020 inch (0.51 mm).

The Office concedes that Gallant and Thomas fail to disclose a fastener element having a bulk aspect ratio of more than 0.020 inch (0.51 mm). However, the Office contends that it would have been obvious for a person of ordinary skill in the art to have a fastener with the aforementioned bulk aspect ratio through Martin's disclosure of a fastener element having a skin friendly aspect ratio, defined as the head area divided by the overall area of the touch fastener. Again, Applicant respectfully disagrees.

Martin discloses a skin-friendly hook component having a relatively large top surface area among the hooks with respect to a hook backing surface area. In particular, Martin discloses a range of aspect ratios, 40-55%, that are believed to be skin-friendly. *See* paragraph [0081]. The skin friendly aspect ratio is defined as the *head area* divided by the *overall area* of the touch fastener. This aspect ratio is defined differently than the bulk aspect ratio defined in Applicant's claim 35. Claim 35 recites a fastener element having a bulk aspect, defined as a ratio of 1) the *product* of an *overall length* of the fastener element, measured parallel to the sheet-form base in the engagement direction above an elevation of the tip, and *fastener element thickness*, measured parallel to the sheet-form base and the engagement direction at the elevation of the tip, to 2) an *overall height* of the fastener element, measured perpendicular to the sheet-form base, of more than 0.020 inch (0.51 mm). Applicants have found that a touch fastener with the aforementioned ratio strongly engages a low pile height. Martin does not disclose or suggest any ratio relating to a fastener element's overall length, thickness, and height. Rather, Martin

discloses a different ratio relating to head area with a different motivation of providing a fastener with minimal penetration distance for optimum skin-friendliness.

Applicants submit that claim 35 and its dependent claims are non-obvious over Gallant in view of Thomas, or of Thomas and Martin, for at least the reason that neither cited combination of references suggests nor enables a touch fastener element having a bulk aspect, defined as a ratio of the product of an overall length of the fastener element and fastener element thickness, to an overall height of the fastener element of more than 0.020 inch (0.51 mm).

Applicants respectfully submit that all claims are non-obvious over Gallant in view of Thomas, or in view of both Thomas and Martin, for at least the reasons outlined above, and respectfully request a Notice of Allowance.

The Examiner takes official notice that a fastener component having two crooks and an upper well is well known in the art. For the record, Applicants do not concur that finding such elements in the prior art makes reciting them in connection with or in the context of a broader claimed invention obvious. Thus, Applicants do not concur with the Examiner's official notices, and don't believe that patentability of the claims is determined by such notices.

CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment. The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of this patent application.

Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 05918-339001.

Respectfully submitted,

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